

Comments on Petition for Rule Making RM-11306

Thank you for the opportunity to submit comments on RM-11306 filed by the ARRL. I have been a licensed amateur radio operator for almost 38 years and have operated on numerous modes (e.g., CW, SSB, SSTV, RTTY, PACTOR, packet) and all amateur bands from 1.8 MHz up through 144 MHz.

This petition proposes that the FCC regulate the amateur bands by necessary bandwidth rather than by mode. While I have no objections to this basic approach, there are many flaws in the details proposed by the ARRL. The following are among the more serious shortcomings in the petition.

1. Unlike the ARRL, I see no compelling reason to make a regulatory distinction between bandwidths of 200 Hz and 500 Hz. Both of these bandwidths are essentially "narrow band" and voluntary band plans should be adequate for all modes having a necessary bandwidth no greater than 500 Hz.
2. As pointed out on page 13 of RM-11306, what is commonly referred to in the amateur community as "semi-automatic control" is where a station which is automatically controlled cannot initiate transmissions; all communication must be initiated by a station under local or remote control by a control operator. Although the current FCC rules do not recognize the term "semi-automatic control," the rules do permit this method of communication on any frequency where digital operation is authorized to U.S. operators if the unattended (automatically controlled) station occupies a bandwidth no greater than 500 Hz.

On page 14 of RM-11306 the ARRL requests that the Commission modify Section 97.221(c) to delete the limitations on semi-automatic control and to permit the same throughout the amateur HF bands. The ARRL believes that the "hidden transmitter effect" on HF is a small risk that "...can best be managed through a combination of technology and respectful operating practices." I strongly disagree with the ARRL's assessment of the risk and urge the Commission to do one of two things: (a) continue the current limitations, or (b) treat "semi-automatic control" the same as "automatic control."

The technology needed for the unattended station to effectively listen before responding to an interrogation is not likely to be developed for many years; furthermore, since the operator initiating the transmission does not know whether the frequency is in use at the unattended station's location, the station under automatic control may suddenly begin transmitting on a busy

frequency. The best course of action for the Commission in this regard is to redefine "automatic" operation on HF to include the so-called semi-automatic control and to limit this operation to a rather narrow portion on each of the amateur bands. I suggest that all stations operating under automatic or semi-automatic control on the HF amateur bands be limited to the following frequencies:

3.650 to 3.675 MHz
7.100 to 7.125 MHz
10.140 to 10.150 MHz (500 Hz maximum bandwidth)
14.100 to 14.125 MHz
18.110 to 18.125 MHz
21.150 to 21.175 MHz
24.930 to 24.940 MHz
28.125 to 28.175 MHz

3. The maximum bandwidth of 3.5 kHz on the 160-meter band should extend from 1.840 to 2.000 MHz. The bottom 40 kHz of that band should be reserved for narrow-band modes (500 Hz or less). The reasons for subdividing the HF bands by bandwidth are just as valid for the 160-meter band. If the Commission is ready to regulate the amateur bands by bandwidth, it should be consistent by including 160 meters in the new approach.

4. The ARRL proposes that double-sideband amplitude modulated (DSB-AM) telephony be allowed to continue, but recommends a necessary bandwidth of 9 kHz in order to leave no doubt that DSB-AM transmitters now in use can continue to be operated. Although there may be much nostalgia among a number of amateurs to retain DSB-AM, the FCC should phase out this mode on the lower amateur bands (e.g., eliminate DSB-AM operations on all amateur frequencies below 28 MHz by some definite date). With the power inefficiency and wide bandwidth characteristics of DSB-AM, it is hard to justify its continued use on our lower frequency bands merely for reasons of nostalgia.

5. The frequencies proposed by the ARRL for the 80-meter band would effectively expand the current phone subbands too much. The 500-Hz bandwidth (BW) frequencies should extend from 3.500 to 3.650 MHz and the 3.5-kHz BW frequencies should extend from 3.650 to 4.000 MHz. Even these suggested subbands would likely require many CW nets to move from their current frequencies in the 3.600 to 3.700 MHz range.

6. The maximum necessary bandwidth on 30 meters should be limited to 500 Hz. The ARRL requests that 3.5 kHz be permitted from 10.135 to 10.150 MHz with the understanding that voluntary band plans would "discourage" telephony on 30 meters. Such a scheme will surely fail, however, and the most consistent approach for the Commission is to limit the bandwidth on this band to 500 Hz.

In conclusion, although regulation by bandwidth is a good idea, there are many flaws in the ARRL petition. If the Commission decides to adopt this approach, there are many details in the ARRL proposal that should be modified.

Very truly yours,

Mickey Cox K5MC